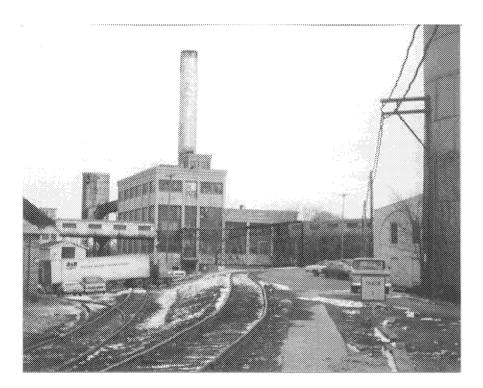


Western Disposal Arga

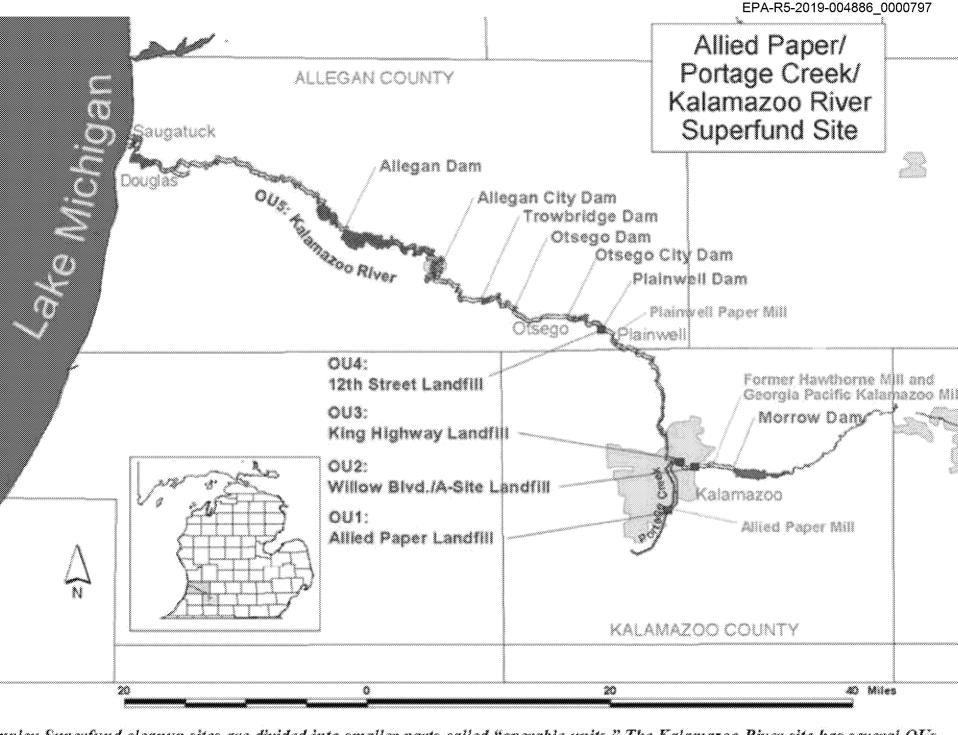
A Case Study of the Allied Paper Site"

The Site





Originally built in the 1890s, abandoned in 1998, Kalamazoo's Allied Paper Mill (a.k.a. Bryant Paper Mill, Performance Papers, Portage Paper) was the original source of PCBs associated with the production of paper.



What are PCBs?

PCBs are a group of toxic chemicals that were produced in the United States between 1929 and 1978 for use primarily as industrial coolants, insulators and lubricants. PCBs were used in hundreds of industrial and commercial applications, including carbonless copy paper—which contributed to the Kalamazoo River contamination—and many other applications because they were stable and resisted wear and chemical breakdown

The same chemical properties that made PCBs useful to industry are now responsible for persistent levels of PCBs remaining in the environment, including the Kalamazoo River. PCBs last in the environment because they adhere readily to organic material in

sediment and soil and tend to build up in the fatty tissue of fish and other animals. PCBs have been demonstrated to cause a variety of adverse health effects in animals. PCBs cause cancer and may affect the immune, reproductive, nervous and endocrine systems. Studies suggest PCBs have similar effects on people.

The different health effects of PCBs may be interrelated, as alterations in one system may have significant implications for other systems of the body. The potential adverse environmental and health effects of PCBs were not well understood until 1977, when the government banned most uses of PCBs.

On the Web:

www.epa.gov/region5/sites/kalproject

Source:

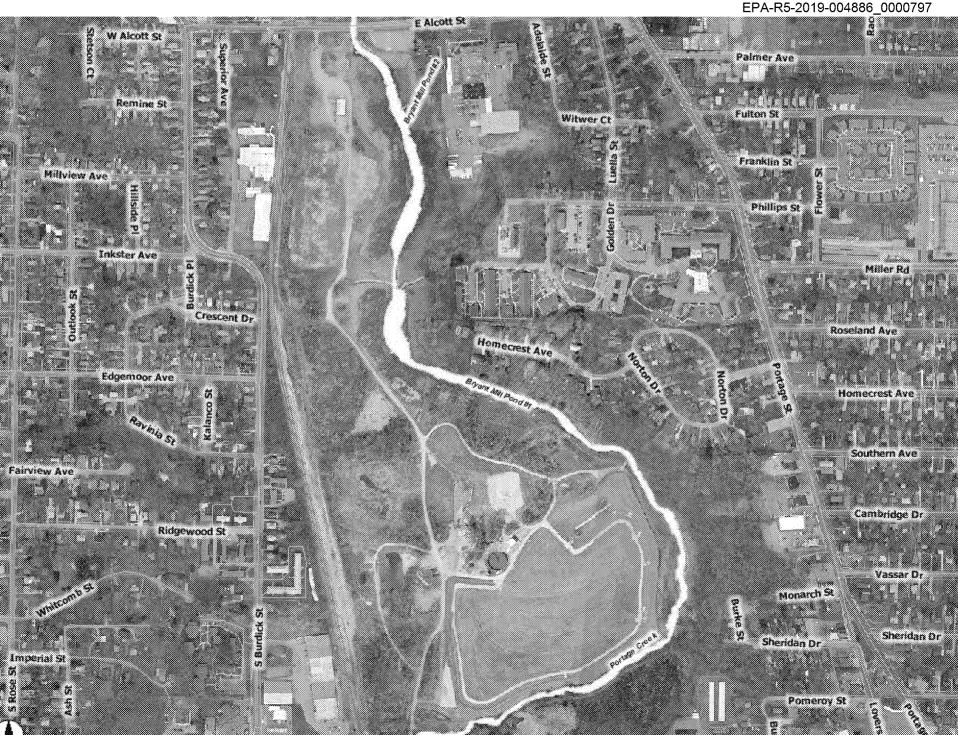


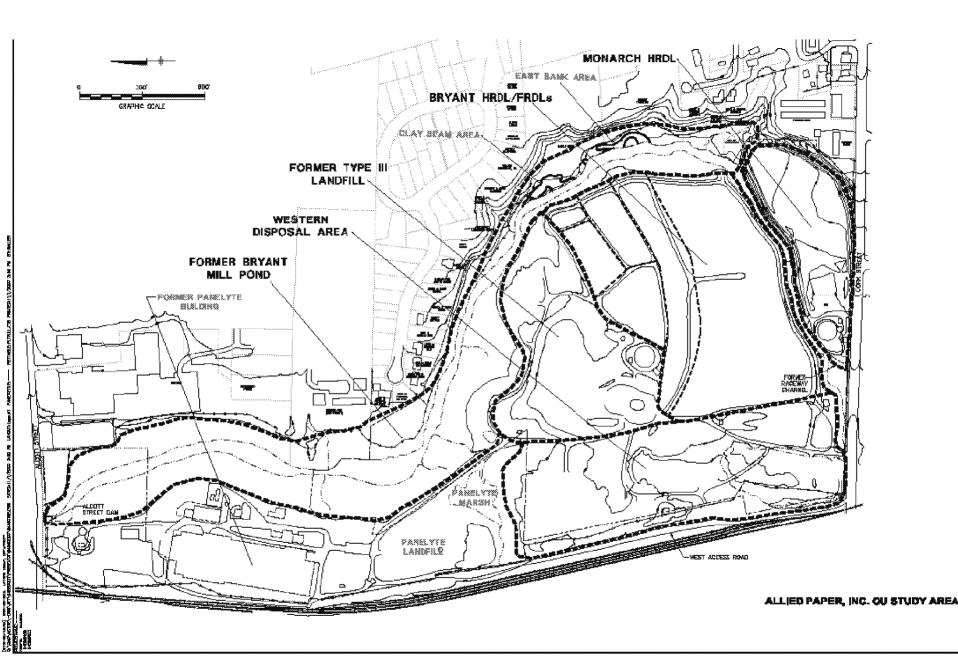
Plainwell PCB Cleanup Progress, Updates, and Public Meeting

Allied Paper/Portage Creek/Kalamazoo River Superfund Site Kalamazoo, Michigan March 2008

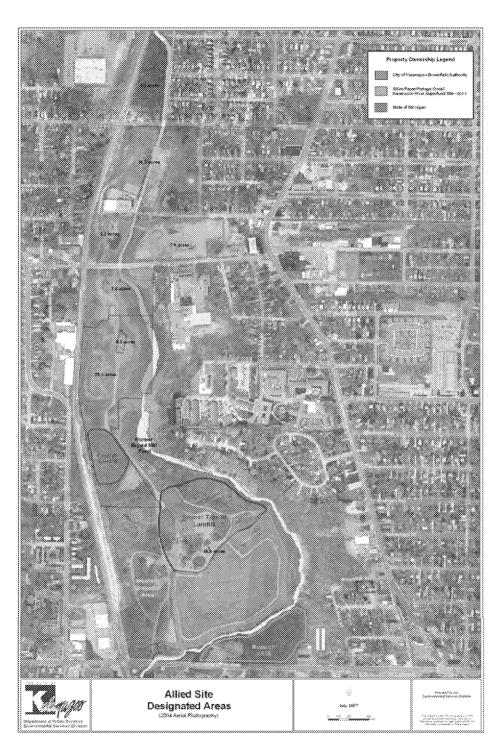
Allied Site: Part of a Superfund Site

- August 1990, Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund site was officially included on the NPL.
- In Spring of 1997, MDEQ requested that EPA assist them in performing an emergency removal of the PCB contamination in the former Bryant Mill Pond area and Portage Creek.
- June 1998 through May 1999, ~150,000 cubic yards (up to 1,000 ppm) was excavated from the floodplain and placed in dewatering lagoons (HRDL and FRDLs). Interim measures included a "temporary cap" on the lagoon materials, and re-vegetation.
- Post December 1999: Plan to prepare RI/FS for OU-1.
- 2000-2004: Liner cap over lagoons.
- 2001: 2,600 linear feet of sheet-pile/groundwater recovery system along creek.





The site is approximately 89 acres and is adjacent to residential and commercial areas along Portage Creek, ~3 miles upstream of the Kalamazoo River.



The Allied Paper Site: A "temporary" storage site for PCBladen sediment removed from the 100 year floodplain of the old Bryant Mill site in 1998/99.

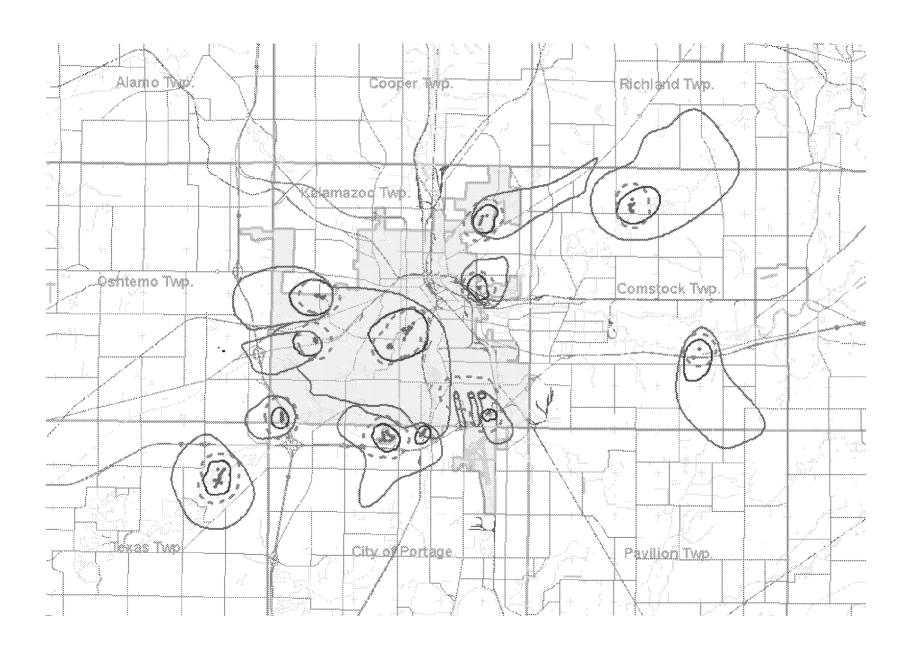
ANSWER:

The surface and subsurface area surrounding a water well or wellfield, supplying a public water system, through which contaminants are reasonably likely to move toward and reach such water well or wellfield.

QUESTION:

"What is a Wellhead Protection Area?"





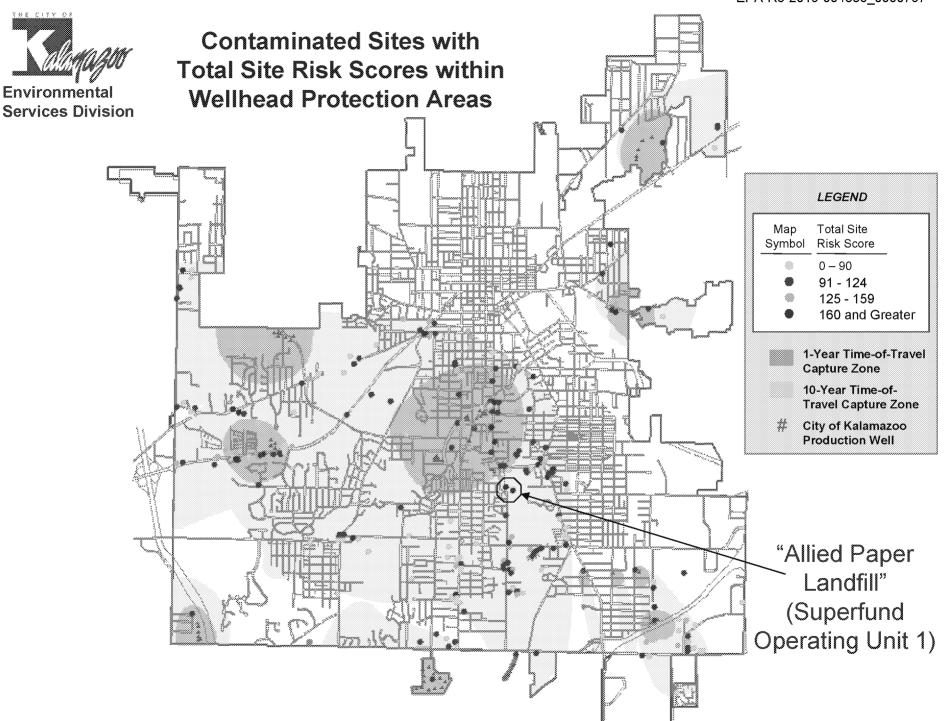
ANSWER:

Identification of existing and potential sources of contamination within the wellhead protection area which might represent a "threat" to the public water supply system (PWSS).

QUESTION:

"What is a Contaminant Source Inventory"?





ANSWER:

An organized strategy to minimize known and potential risks within Wellhead Protection Areas.

QUESTION:

"What is a Wellhead Protection Management Plan?"

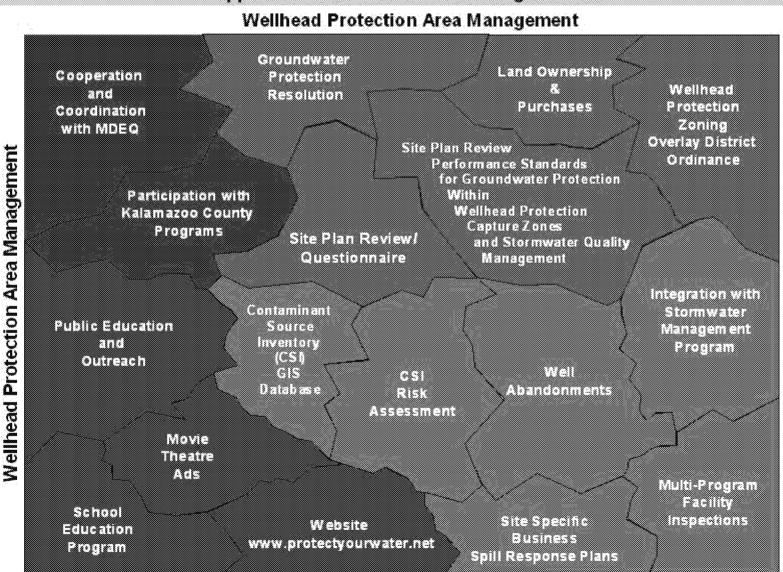


Wellhead Protection Program

Wellhead Protection Area Management



Approved Wellhead Protection Program Plan



Approved Wellhead Protection Program Plan

Wellhead Protection Program

Wellhead Protection Area Management

Approved Wellhead Protection Program Plan

Wellhead Protection Program

takes precisely arms admits passed to seep paying

Agreements will boost Kalamazoo Kiver Cleanup

The "News"

ALLIED PAPER/PORTAGE CREEK/KALAMAZOO RIVER SUPERFUND SITE:

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> *К*риавы Environmental Protection sateta patiun



FIRST CLASS

Upcoming Open House and Public Meeting about Kalamazoo River Superfund Site

Open House

Plainwell

(no formal presentation) 1 - 3:30 p.m. Plainwell Community Schools Administration Building Conference Room

600 School Drive

EPA will share information about two agreements reached as a result of mediation at both the open house and the meeting. EPA and other officials will be available to answer. Area and Kalamazoo River, you may contact EPA. questions and discuss the Plainwell Impoundment Area and Kalamazoo River site at both the 1 p m, open house and the 6.30 p.m. meeting. These will also be a formal presentation at the meeting, but not at the open house.

Public Meeting

(with formal presentation) March 15, 2007 6:30 - 8:30 p.m. Plainwell High School Cafeteria 684 Starr Rd. (also known as 102nd St.). **Plainwell**

> If you have scientific and technical questions about the PCB cleanup of the Plainwell Impoundment Remedial Project Manager Shari Kolak (contact information on Page 1).

When possible, site information is also posted on the Internet at epa govinegionSkites kalproject



United States
Environmental Protection
Agency

Agreements Will Boost Kalamazoo River Cleanup

Allied Paper/Portage Creek/Kalamazoo River Superfund Site Kalamazoo, Michigan February 2007

Open house and public meeting

EFA has scheduled an open house. followed by a formal modic meeting on March 15 (see locations on back page), so you can learn more about the latest developments in the Kalamazoo River cleanin. At the onen house, which runs from 1 - 3:30 p.m. at the Plainwell Community Schools Administration Building, EPA and other officials will be available to meet one-on-one with the public to discuss the site activities. At the public meeting from 6:30 - 8:30 p.m. at the Plainwell High School Cafereria, officials will make a formal presentation about the new agreements and details on the cleanin plans

if you need special accommodations to attend the open house or public meeting, contact EPA Community hyvolvement Coordinator Don de Blasio at the contact numbers listed below.

Contact EPA

For more information or if you have comments about the Kalamazoo Rives cleanup, you may contact these EFA representatives:

Don de Blasio

Community Involvement Coordinator (312) 886-4360 or (800) 621-8431, weekdays 10 a.m. - 5.30 p.m. deblasic.don.wepa.gov

Shari Kolak

Remedial Project Manages (312) 886-6151 or (800) 621-8451, weekdays 10 a.m. - 5:30 p.m. kolak sharazepa gov

Samuel Borries

On-Scene Coordinator (312) 353-8360 or (800) 621-8431 weekdays 10 a.m. – 5.30 p.m. borries samuel Wepa gov Clearup work will begin soon on the Kalamazoo River, now that two important legal agreements have been signed.

Under the two agreements, known as "administrative orders on consent," Millennium Holdings LLC and Georgia-Pacific Corp. will perform a cleanup in the Plainwell Impoundment Area, a portion of the Kalamazoo River Superfund site. The two companies will also conduct additional nameling of the river.

The agreements, signed on February 21, 2007, are legally enforceable in court. They are the result of a little over two years of mediated negotiations between the two companies and U.S. Environmental Protection Agency, Michigan Department of Environmental Quality (MDEQ) and the Natural Resource Trustees, which include the Michigan Department of Natural Resources, MDEQ, Michigan Department of Attorney General, National Oceanic and Atmospheric Administration, and the U.S. Fish and Wildlife Service.

Background

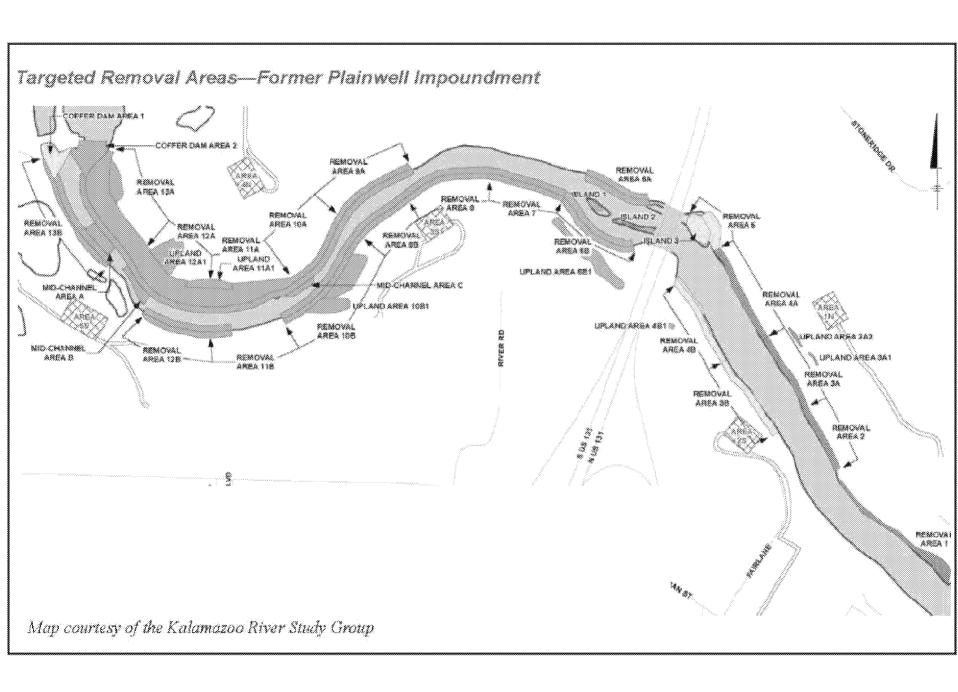
Since November 2004, EPA has been involved in confidential discussions to resolve differences between the mediating parties that were delaying the cleanup and restoration of the Kalamazoo River site. From the beginning, one of the goals of the negotiations was to reach agreement on how best to use the existing data to move forward with cleanup. The parties also needed to determine whether additional investigations were needed before EPA could develop cleanup options for the first reach of the river. One result of the mediation was an agreement for the potentially sesponsible parties (PRPs) to perform a removal action in the Plainwell Impoundment. Another result was an agreement between EPA and the PRPs to conduct additional sampling throughout the site.

Removal action at Plainwell Impoundment

The PRPs agreed to perform a "time critical removal action" (an accelerated cleanup method used when quick action is needed to clean up hazardous materials) at the Plainwell Impoundment. The Plainwell Impoundment stretches from the Plainwell Dam upstream past U.S. 131 and includes polluted river sediment and banks and floodplain areas.

EPA and MDEQ have approved the engineering design document for the removal action, which is attached to the cleanup agreement and available for review in the site information repositories (see locations on Page 2). The cleanup will include removal of about 132,000 cubic yards of waste material, containing 4,400 pounds of PCBs, from the impoundment area. The estimated cost of the cleanup is \$21 million. If you would like more details on this activity, please see the box on Page 3. This cleanup action will begin this spring.





What are PCBs?

PCBs are a group of 209 chemicals that were produced in the United States between 1929 and 1978 for use psimarily as industrial coolants, insulators, and lubricants. PCBs were used in hundreds of industrial and commercial applications including electrical, heat transfer, and hydraulic equipment, as plasticizers in paints, plastics, and rubber products; in pigments, dyes, and carbonless copy paper, and many other applications because they were stable and resisted wear and chemical breakdown.

The same chemical properties that made PCBs useful to industry are now responsible for persistent levels of PCBs remaining in the environment, including the Kalamazoo River PCBs persist in the environment because they adhere readily to organic material in sediment and soil, and tend to build up in the fatty tissue of fish and other animals. PCBs have been demonstrated to cause a variety of adverse health effects in animals. PCBs cause cancer and non-cancer health effects on the immune, reproductive, nervous, and endocrine systems. Studies suggest PCBs have similar effects on humans.

The different health effects of PCBs may be interrelated, as alterations in one system may have significant implications for the other systems of the body. The potential adverse environmental and health effects of PCBs were not well understood until 1977, when the government banned most uses of PCBs.

Additional study of Kalamazoo River

This agreement requires the PRPs to conduct additional sampling throughout the Kalamazoo River in what is called a supplemental remedial investigation and feasibility study agreement. The additional sampling will build upon data that has already been collected. The data produced from the additional sampling will be summarized in supplemental remedial investigation and feasibility study reports and will help EPA determine what, if any, additional cleanup needs to occur at the site. The agreement allows the sampling to be phased, so that sampling will begin at the most upstream reach of the river at Morrow Dam and will continue in the downstream sections once sampling is complete in a previous reach. The estimated cost of the additional

upstream stretch of river between Morrow Dam and the Plainwell Dam including a three-mile stretch of Portage Creek. A work plan for the upstream sampling was drafted as part of the negotiations and has been approved by EPA. The work plan contains a detailed description of the sampling including how and where the samples will be collected. The work plan is attached to the Supplemental Remedial Investigation/Feasibility Study agreement, and is available for review in the site information repositories. Sampling of the upstream reach of the river will begin this spring.

Information libraries

The public can read documents related to the Kalamazoo River Superfund site at these places:

Kalamazoo Public Library 315 S. Rose St. Kalamazoo

Charles Ransom Library 80 S. Sherwood Ave. Plainwell

Allegan Public Library 331 Hubbard St. Allegan

Otsego District Library 219 S. Farmer St. Otsego

Saugatuck-Douglas Library 10 Mixes St. Douglas

Waldo Library Western Michigan University 1903 W. Michigan Ave. Kalamazoo

On the Web:

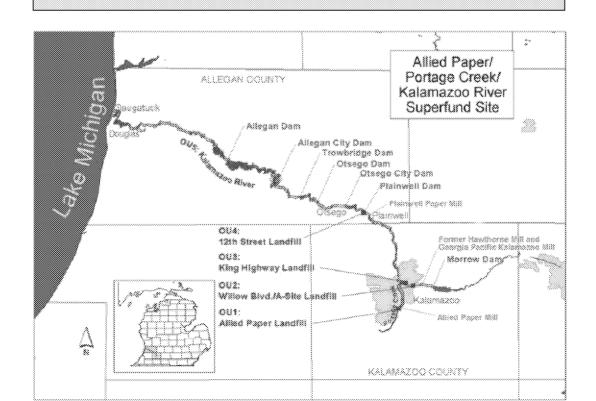
epa.gov/region5/sites/kalproject/

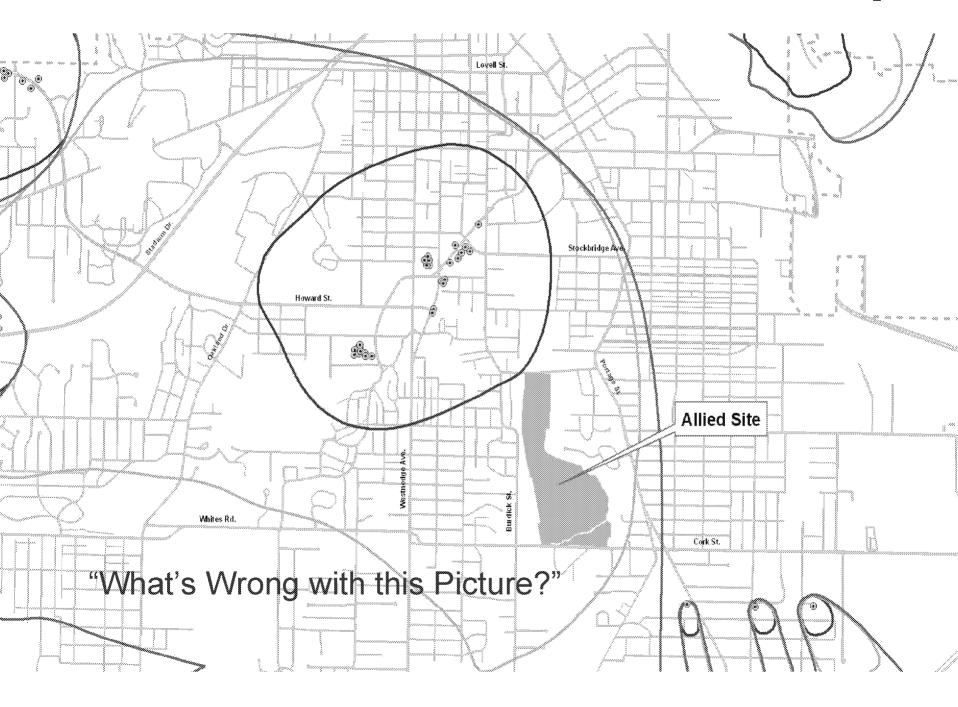
Details of the Plainwell Impoundment cleanup:

- Remove a portion of the Plainwell Dam in order to perform as much as possible diedging of PCBcontaminated sediment "in the dry"
- Dewater portions of the removal area to the extent feasible using coffer dams and a water control structure
- Remove in-stream sediment within 40 feet of
 existing riverbanks to a cleanup standard of either
 1 part per million PCB or, to preserve the streambed,
 to within six inches of the channel bottom as it
 existed before the Plainwell Dam was constructed
 ("parts per million" is abbreviated ppm and is a tiny
 amount similar to a drop of food dye in 16 gallons
 of water)
- Implement re-suspension control measures to prevent migration of PCB-contaminated sediment

- Remove flood plain soil where PCBs are present above 50 ppm to achieve a cleanup goal of 5 ppm
- Create a 30-150 foot wide clean buffer along the river
- . Create stable riverbanks
- Remove three mid-channel areas that have PCB concentrations greater than 50 ppm
- Remove soil with PCB concentrations greater than 4 ppm from an area of the flood plain near residential properties upstream of U.S. 131
- Dispose of the removed PCB-contaminated sediment and soil at the Allied Paper Landfill
- Create a stable, natural channel and re-vegetate with native plants

What?!!





COMMUNICATION

- March 7: E-mail from Public Services Director to EPA with list of primary concerns, questions, and comments including: the proposed disposal site was within a 5-Year T.O.T. Capture Zone; lack of controls to ensure non-migration of contaminants; truck traffic through residential area; impacts to flood mitigation plan for earthen dam; proposed disposal area is located between 3 major neighborhoods; unknown effect of 132,000 cubic yards of additional material on current site.
- March 15 (morning): Meeting between City of Kalamazoo, USEPA & MDEQ to discuss list of issues.
- March 15 (evening): Public Meeting in Plainwell
- April 2: Meeting between staff of the City of Kalamazoo, USEPA
 & MDEQ

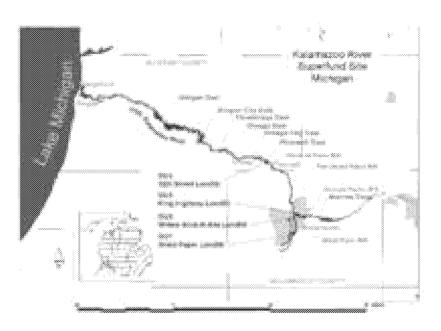
CITY IDENTIFIED ISSUES/CONCERNS REGARDING DISPOSAL PLAN

(A Sampling of a 10-Page Table)

- The proposed disposal site ("Allied Paper Site") of 132,000 cubic yards of PCB-laden river sediment is within a 5-year T.O.T. Capture Zone (disconnect within MDEQ R & R and Water regarding drinking water pathways).
- The site has been identified on a number of State and Federal Sites of Environmental Contamination. The site was termed a "temporary" disposal area for the ~150K cubic yards of PCB laden sediment in 1998/99. It should be adequately/permanently cleaned up and formally closed, not deliberately exacerbated by adding additional contaminated material.
- The disposal plan and use of the site as a landfill is contrary to the recommended management strategies for WHPAs (Landfills = high risk to groundwater).
- The proposed disposal area is not a licensed landfill nor do we think it meets the alternative "applicable or relevant and appropriate requirements (ARARs)" such as TSCA criteria (lined landfill). No scientific validation of the site to determine that no adverse risk to groundwater would occur. Other appropriate licensed and permitted landfills already existed as alternative disposal areas.
- Also, numerous questions raised regarding site characteristics.
- No justification of "Time Critical Removal Action."
- EPA did not follow its own "Superfund Community Involvement Handbook."
- What about the evaluation of the livability issue of the affected neighborhoods, the past state and federal funding already invested in this area, and "Environmental Justice"?

PCBs, Kalamazoo River and SuperFund Information

PCB Forum, April 12, 2007 Western Michigan University



<u>Dr. Charles</u> Presentation <u>Dr. Duane Hampton</u> <u>Presentation</u> <u>KRWC</u> Presentation EPA/MDEQ Presentation

Kalamazoo River cleanup delayed; additional community input planned

Release date: 04/13/2007

Contact Information: (EPA) Mick Hans, (312) 353-5050, hans.mick@epa.gov (MDEQ) Bob McCann, (517) 241-7397

CONTACT: (EPA) Mick Hans, (312) 353-5050, hans.mick@epa.gov (MDEQ) Bob McCann, (517) 241-7397

> FOR IMMEDIATE RELEASE No. 07-OPA059

(Chicago, III. - Apr. 13, 2007) U.S. Environmental Protection Agency Region 5 today announced it would delay until May 5 the start of Superfund cleanup activity at the Plainwell Dam, in Plainwell, Mich.



Over the next several weeks, EPA, in consultation with Michigan Department of Environmental Quality, will seek community input on plans to dispose of PCB-contaminated sediment excavated from the Kalamazoo River at the Allied Paper landfill in Kalamazoo.



"Kalamazoo Mayor McKinney and other elected officials and residents have made it clear that they have concerns and need more information about the sediment disposal plans," said Regional Administrator Mary Gade. "We are fully confident that the cleanup and disposal approach announced on February 28th is safe and effective, and will bring momentum to cleanup of the

4/17/07 – UPDATE: City of Kalamazoo citizens, elected officials, staff, and neighborhood representatives continue to fight the proposed disposal of 132,000 cubic yards of PCB contaminated sediments at the Allied Paper Disposal site between Alcott and Cork Streets.

Citizen involvement, including extensive letter writing to state and federal officials, has caused the U.S. EPA to implement a three-week moratorium on all activities at the Plainwell Impoundment and the Allied Paper Disposal site. MDEQ and U.S. EPA are scheduled to meet with City of Kalamazoo elected officials and staff on Wednesday, April 18, 2007. Your continued involvement is needed to make this moratorium permanent.

Concerned citizens are urged to continue to contact their elected representatives and encourage them to continue to question this unreasonable "solution" to a long-term problem. For more details on the specific aspects of this project visit the EPA's Kalamazoo River Cleanup website.

Also, you can view the letters that Mayor Hannah McKinney has recently sent to US <u>Senator Carl Levin</u> (.pdf) and <u>Richard Karl</u> (.pdf), Director of the US EPA Region 5 Superfund Division.

Below is a list of representatives that you can contact on this topic://weblink

COMMUNICATION (Cont.)

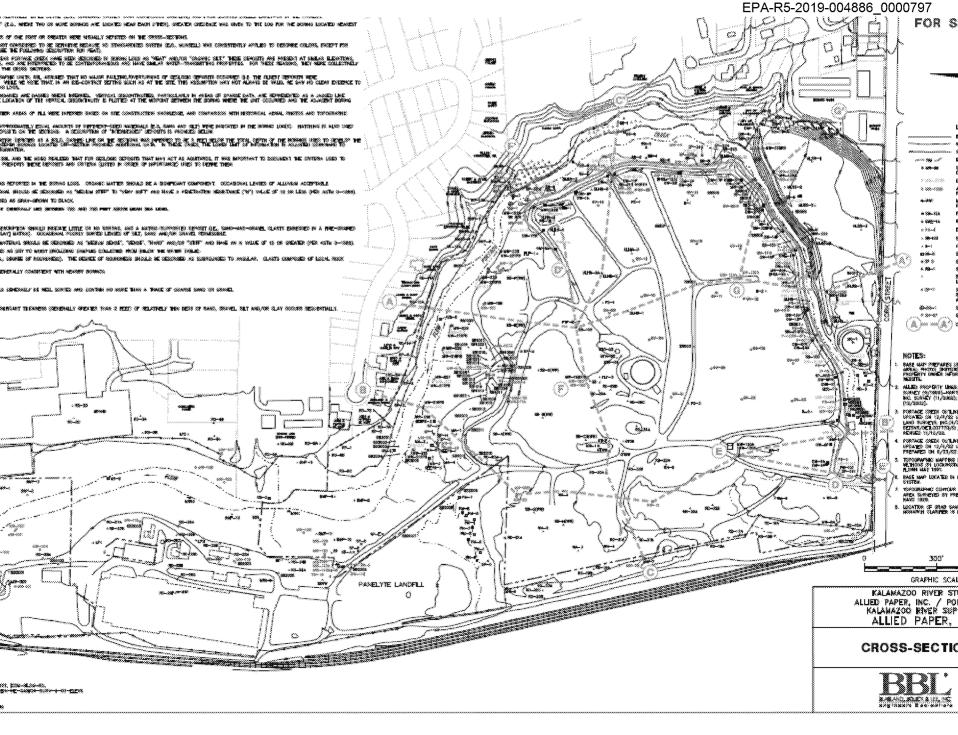
- March/April: Discussions between City staff & MDEQ Drinking Water staff
- April 18: Meeting between Officials of the City of Kalamazoo & MDEQ
- April 18: Letter from City of Kalamazoo Mayor to MDEQ Director
- April 18: Letter from City of Kalamazoo Manager to MDEQ Director
- April: Letters and support from U.S. Senator Debbie Stabenow & other politicians to EPA
- April: Numerous letters from Kalamazoo Environmental Justice Coalition & RESPECT to numerous community organizations and officials





Meanwhile, back at the ranch....

Staff continue to perform technical review of Allied Site characteristics, research required EPA process, and continue work to get the Wellhead Protection Zoning Overlay and Performance Standards formally adopted.



EPA-R5-2019-004886_0000797 Western Disposal Area

Wellhead Protection Zoning Overlay Ordinance: Primary Objectives

- Prevent the creation or establishment of noncompatible land use activities within WHP TOT Capture Zones that have the potential to contaminate groundwater resources, or prevent/limit the City's ability to obtain necessary State well permits to replace or add wells when necessary
- Protect designated groundwater supplies from contamination resulting from spills, leaks, and other releases into groundwater supplies caused by the improper storage, handling, use, production, or discharge of Regulated Substances within WHP TOT Capture Zones by the use of Performance Standards and/or BMPs

Wellhead Protection Zoning Overlay Ordinance: Primary Objectives (Cont.)

- Minimize interruptions to businesses by only regulating specific land-use activities within specific designated time-of-travel zones, as based upon determined potential risk to the Public Water Supply System
- Prevent or minimize public and private losses due to contamination of the public water supply by avoiding expenditure of public money for costly pollution remediation projects and/or replacement of Public Water Supply System assets

Kalamazoo River update: new plan for 2007 dredge disposal announced Release date: 04/25/2007

Contact Information: Anne Rowan, 312-353-9391, rowan.anne@epa.gov Mick Hans, 312-353-5050, hans.mick@epa.gov (MDEQ) Bob McCann, 517-241-7397

FOR IMMEDIATE RELEASE No. 07-OPA068

(Chicago, III. - April 25, 2007) U.S. Environmental Protection Agency Region 5 today announced a tentative agreement with two companies that PCB-contaminated sediment removed this year from an area around the Plainwell Impoundment will not be sent to the Allied Paper disposal area in Kalamazoo, Mich.



"EPA has clearly heard the concerns of Kalamazoo officials and residents," said Regional Administrator Mary Gade. "This agreement allows more time to better address local concerns about disposal without further delaying the time-critical cleanup work at the Plainwell Impoundment."

No determination has been made regarding a disposal site or sites for material excavated during 2008. EPA will solicit public input on all disposal options considered.

"The agreement ensures this important cleanup project will move forward while addressing the concerns that we have heard," said Steven E. Chester, director of the Michigan Department of Environmental Quality. "I look forward to keeping an open dialogue with the community as we continue our efforts to restore the Kalamazoo River."

The 2007 cleanup work - which was halted on April 13 to allow for additional community input - will resume on May 2. EPA expects that about one-third of the sediment will be removed during 2007. Under the new plan, material excavated from the river during 2007 will be sent to permitted commercial landfills.

The alternative plan for 2007 was proposed by Georgia-Pacific and Millennium Holdings. The companies agreed to perform the \$21-25 million cleanup under EPA and Michigan DEQ oversight earlier this year. The government agencies and companies agreed to the new disposal approach this week. A variety of technical, logistical and financial details will be addressed over the next few weeks.

Welcome to RESPECT Kalamazoo

Welcome

Info About The Situation

Join Us

Contacts to Stop The EPA

Updates



Mission Statement:

RESPECT is a collective group of concerned citizens committed to a total moratorium on disposals at the Allied site and a complete and appropriate cleanup of all PCB contaminated areas in the Kalamazoo River Environment.

We demand a permanent solution NOW!

The EPA will not be dumping at the Allied Site! Congrats, we all won a huge battle

but the war is not over!

Kalamazoo River update: Plainwell dredging begins this week

Release date: 06/05/2007

Contact Information: Mick Hans, 312 353-5050, hans.mick@epa.gov

FOR IMMEDIATE RELEASE No. 07-OPA092

CHICAGO (June 5, 2007) - U.S. Environmental Protection Agency Region 5 announced today that dredging of PCB-contaminated sediment near the Kalamazoo River's Plainwell Impoundment would begin this week. Dredging equipment is expected to be visible on the river by June 7.

EPA and Michigan Department of Environmental Quality will oversee the work of contractors hired by two responsible parties: Georgia-Pacific and Millennium Holdings. The 2007 dredging work will continue through the fall, weather permitting.

The two-year \$25 million cleanup agreement among EPA, MDEQ and the responsible parties was announced Feb. 28. An estimated 132,000 cubic yards of sediment will be removed from a 1.5-mile area extending upstream of the Plainwell Dam. A second agreement, between EPA and the two companies, requires the companies to perform about \$15 million in additional environmental sampling and investigation throughout the 80-mile Kalamazoo River Superfund site.

Codimon

Sediment removed from the river will be separated into two waste streams. During 2007, material with PCB content above 50 parts per million will be sent to Environmental Quality Co.'s Wayne Disposal Landfill in Belleville, Mich. Wayne Disposal is a permitted chemical waste landfill that already receives similar material. The dredged sediment containing less than 50 parts per million PCBs is considered non-hazardous solid waste. It will be sent to Allied Waste's C and C Landfill near Marshall, Mich., which is also a permitted commercial disposal facility. Disposal locations for the 2008 dredging have not yet been determined.

Informational open houses on Kalamazoo River cleanup June 27, 1:30 p.m. and 6:30 p.m.

Release date: 06/14/2007

Contact Information: Mick Hans, 312-353-5050, hans.mick@epa.gov Don de Blasio, 312-886-4360, deblasio.don@epa.gov
FOR IMMEDIATE RELEASE
No. 07-OPA099

Chicago, III. - June 13, 2007) U.S. Environmental Protection Agency Region 5 is holding two open house sessions June 27 on the Kalamazoo River cleanup. Both will be at the Comfort Inn, 622 Allegan St., Plainwell, Mich. Residents are invited to drop by from 1:30 to 3 p.m. or 6:30 to 8 p.m.

The sessions will be identical. No formal presentation is planned. State and local officials may also attend.

If special accommodations are needed, contact EPA community involvement coordinator Don de Blasio by June 20 at 800-621-8431, ext. 64360 (weekdays, 10 a.m. to 5:30 p.m.), or deblasio.don@epa.gov.

EPA-overseen dredging of PCB-contaminated sediment near the Plainwell Impoundment began last week. The project is expected to continue through fall 2008. Site information including new photos is posted at http://www.epa.gov/region5/sites/kalproject.

Kalamazoo River cleanup update: 2008 Disposal Plans; Open House Aug. 22

Release date: 08/02/2007

Contact Information: Don de Blasio, 312-886-4360, deblasio.don@epa.gov

FOR IMMEDIATE RELEASE No. 07-OPA135

CHICAGO (Aug. 2, 2007) - U.S. Environmental Protection Agency Region 5 today announced an agreement with Millennium Holdings and Georgia-Pacific that requires Kalamazoo River sediment dug up in the ongoing Plainwell Dam cleanup in 2008 be sent to a commercial landfill for disposal.

EPA and Michigan Department of Environmental Quality's oversight of the 2007 PCB-contaminated sediment dredging is on schedule. Before work resumes in the spring of 2008, the two companies will recommend to EPA commercial disposal facilities that have the proper permits to handle contaminated sediment removed from the river. Hazardous waste will be separated from waste not regulated by the Toxic Substances Control Act, a practice currently in effect.

Open-house-style update meetings to discuss the dredging will be held 1:30 to 3 and 6:30 to 8 p.m., Wednesday, Aug. 22, at Comfort Inn, 622 Allegan St., Plainwell. Residents who need special accommodations at the meeting may contact EPA Community Involvement Coordinator Don de Blasio at 800-621-8431, ext. 64360, 10 a.m. to 3:45 p.m. weekdays, or deblasio.don@epa.gov.

Dredging work began in early June. As of the last week of July, nearly 6,200 cubic yards of material had been removed from the river and nearby banks. Of that total, about 1,035 cubic yards of sediment with PCBs above 50 parts per million was sent to Environmental Quality Co.'s Wayne Disposal Landfill in Belleville, Mich. Another 5,145 cubic yards of sediment with less than 50 parts per million PCBs, which is considered non-hazardous solid waste, was sent to Allied Waste's C and C Landfill near Marshall, Mich. More than 180 truckloads of sediment have been hauled out of the site.

Millennium Holdings and Georgia-Pacific will begin work later this year on a thorough investigation of PCB contamination along the entire 80-mile Kalamazoo River Superfund site. This is an effort to identify where PCBs are located and the extent of the contamination.

PCBs, or polychlorinated biphenyls, are a group of toxic chemicals that were widely used in carbonless copy paper and as coolants, insulators and lubricants. PCBs are of concern because they concentrate in the food chain resulting in health hazards to people, fish and wildlife. Congress banned the manufacture of new PCBs in 1976 and PCBs still in use are strictly regulated.



United States Environmental Protection Agency

Informational open houses

EPA is holding two open house sessions Aug. 22 so you can learn. more about activities under way on the Kaismazoo River cleanup. Roth will be at the Comfort Inc. 622 Allegan St. Planovell, Mich. People can attend either identical session from 1:30-3 p.m. or 6:30-8 p.m. No formal presentations are planned. EPA representatives and other officials will be available to meet one-on-one with the public to discuss sate activities. If special accommodations are needed, contact EPA Community Involvement Coordinator Don de Blasio at 800-621-8431 Ext. 64360 (weekdays, 10 a.m. to 5.30 p.m.), or deblasco dopići epa govi by Aug. 15.

Contact EPA

For more information, or if you have comments about the Kalamazoo River cleanup, you may contact these EPA representatives:

Don de Blasia

Community Involvement Coordinator 312-886-4360 or 800-621-8431, weekdays 10 a.m. - 5:30 p.m. deblasio.dom@epa.gov

James Saric

Remedial Project Manager 312-886-0992 or 800-621-8431, weekdays 10 a.m. - 5:30 p.m. saric.james/@epa.gov

Samuel Borries

On-Scene Coordinator

Plainwell PCB Cleanup Proceeding on Schedule

Allied Paper/Portage Creek/Kalamazoo River Superfund Site Kalamazoo, Michigan August 2007

U.S. Environmental Protection Agency Region 5 and state partner Michigan Department of Environmental Quality continue to oversee this summer's dredging at the Plainwell Impoundment on the Kalamazco River. The cleanup work is being performed by contractors hired by responsible parties Millennium Holdings LLC and Georgia-Pacific LLC. Dredging is proceeding on schedule and since work began in early June, nearly 6,200 cubic yards or 180 truckloads of FCB-contaminated sediment (mud) have been removed from the river and nearby banks. FCBs are polychlorinated biphenyls, a chemical compound commonly used by industry that at high concentrations and exposures can cause illness in humans and wildlife.

The Plainwell waste is being divided into sediment containing 50 parts per million (ppm) or more of PCBs and material with lower concentrations. Under the federal Toxic Substances and Control Act, EPA regulates the use, storage and disposal of sediment with PCB concentrations exceeding 50 ppm. One part PCB per million parts sediment is a tiny amount, similar to one second in 12 days. Of the total removed so far, about 1,035 cubic yards of sediment with PCBs above the 50 ppm level have been sent to Environmental Quality Co.'s Wayne Disposal Landfill in Belleville, Mich. Another 5,145 cubic yards of sediment with less than 50 ppm PCBs, which is considered nonhazardous waste, have been sent to Allied Waste's C and C Landfill near Marshall. Mich.

Under an agreement this spring between EPA and the responsible companies, Kalamazoo River sediment dug up in the Plainwell Impoundment cleanup next year will be sent off-site to commercial landfills for disposal. Before the Plainwell dredging work resumes in the spring of 2008, Millennium Holdings and Georgia-Pacific will recommend for EPA approval commercial disposal facilities that hold the proper permits to handle the contaminated sediment removed from the river. Those facilities have not yet been identified as the responsible parties negotiate with disposal companies. When completed, the Plainwell cleanup will have removed about 132,000 cubic yards of sediment contaming 4,400 pounds of PCBs. The estimated cost of the removal action is \$30 million and is expected to continue through the fall of 2008. Site information including new photos is posted at www.epa.gov/region5/sites/kalproject.

Supplemental sampling project

EPA clearup projects performed under the Superfund program sometimes include both near-term and long-term activities. On the Kalamazoo River

removal projects are done when scientists conclude contamination threatens people and wildlife with imminent exposure to dangerous substances. The PCBs lying unprotected in the mud of the Plainwell Impoundment are thought to pose just such a threat to people and to animals that eat fish that have swallowed the chemical compound.

While the Piainwell dredging proceeds, the Superfund remedial process continues on other sections of the river. Under another agreement with EPA, Millennium Holdings and Georgia-Pacific will pay for a \$15 million supplemental sampling and analysis project along the entire \$0-mile length of the site. The Kalamazoo River Superfund area stretches from Sangatuck on Lake Michigan to the Morrow Dam. EPA believes this additional sampling and analysis must be completed before any final cleamap decisions can be made for the Kalamazoo River. The sampling in this comprehensive project will initially target the river reach between the Morrow and Plainwell dams, including Portage Creek. The study will identify the extent and location of PCB contamination along the river.

Other cleanup actions

In addition to the removal action at the Plainwell Impoundment, cleanup developments on other parts of the Kalamazoo River site this summer include:

- EPA is reviewing an MDEQ study on the nature and extent of contamination at the Allied Paper Landfill. When the review is completed this fall, the potentially responsible parties will use the study to develop cleanup alternatives for the landfill. After the alternatives are developed, EPA will issue a document called a proposed plan that will be made available for public review and comment.
- For the Willow Boulevard/A-Site Landfill, EPA has begun negotiations with the potentially responsible parties for designing and implementing the cleanup plan developed for the landfill. Work on the cleanup plan, which includes capping the landfill and installing a monitoring network, is expected to begin in 2008.
- Weyerhaemser has begun work on the erosion control
 system at the 12th Street Landfill under the terms
 of its agreement with EPA to design and implement
 the cleamsp remedy for this part of the Kalamazoo
 River site. Weyerhaemser will dig up contaminated
 sediment from the channel next to the landfill, place

- The new slope will be constructed to prevent erosion of the landfill when the river is rerouted to its original channel, which is part of the design for the Plainwell Impoundment removal action.
- Weyerhaenser has also agreed—to investigate and clean up the Plainwell Mill property—to remove PCB-contaminated floodplains on the river banks adjacent to the mill. EPA and MDEQ are reviewing plans for an in-depth examination of the nature and extent of hazardous waste at the Plainwell Mill.
- Georgia-Pacific completed the removal of hazardous waste from certain areas of its Kalamazoo mill and sediment from nearby floodplains. Most of this waste was consolidated with the material in the Willow Boulevard/A-Site Landfill and will be capped as part of the final cleanup for that part of the Kalamazoo site.

Information libraries

The public can read documents related to the Kalamazoo River Superfund site at the following places:

Kalamazoo Public Library

315 S. Rose St.

Kalamazeo

Charles Ransom Library

80 S. Sherwood Ave.

Plainwell

Allegan Public Library

331 Hubbard St.

Allegan

Otsego District Library

219 S. Farmer St.

Otsego

Saugatuck-Douglas Library

10 Mixer St.

Douglas

Waldo Library

Western Michigan University

903 W. Michigan Ave.

Kalamazco

Informational open houses on Kalamazoo River cleanup Nov. 7, 1:30 p.m. and 6:30 p.m.

Release date: 10/29/2007

Contact Information: Mick Hans, 312-353-5050, hans.mick@epa.gov Don de Blasio, 312-886-4360, deblasio.don@epa.gov

FOR IMMEDIATE RELEASE No. 07-OPA200

CHICAGO (Oct. 29, 2007) - U.S. Environmental Protection Agency Region 5 is holding two open house sessions Wednesday, Nov. 7, on the Kalamazoo River cleanup. Both will be at the Comfort Inn, 622 Allegan St., Plainwell, Mich. Residents are invited to drop by from 1:30 to 3 p.m. or 6:30 to 8 p.m.

The sessions will be identical. A formal update presentation will begin at 1:45 and 6:45 p.m., followed by time to meet one-on-one with EPA, Michigan and local officials.

If special accommodations are needed, contact EPA community involvement coordinator Don de Blasio by Oct. 31 at 800-621-8431, Ext. 64360 (weekdays, 10 a.m. to 5:30 p.m.), or deblasio.don@epa.gov.

EPA-overseen dredging of PCB-contaminated sediment near the Plainwell Impoundment will wrap up for the season in a few weeks. The project is expected to continue through fall 2008. Site information including photos is posted at http://www.epa.gov/region5/sites/kalproject.

NOTE

On November 6, a meeting between EPA and the Allied Site Task Force (KRWC, COK, KC, COC, KRCC, CUD, KEC, HHNA, WMU) was held regarding: time-table for the completion & review of Draft RI prior to starting FS (MDEQ recommendation 6-07), and input process for FS.



United States Environmental Protection Agency

Plainwell PCB Cleanup Progress, Updates, and Public Meeting

Allied Paper/Portage Creek/Kalamazoo River Superfund Site Kalamazoo, Michigan March 2008

Informational open house

EPA is holding an open house Wednesday, April 2, so you can learn more about the latest developments in the Kalamazoo River cleanup

The open house will be at 6:30 p.m. at the Comfort Inn and Conference Center, 622 Allegan St., Plainwell, Mich. A formal presentation will be at 6:45 p.m.

EPA representatives and other officials will make a formal presentation and be available to discuss site activities with you individually. If you need special accommodations, contact EPA Community Involvement Coordinator Don de Blasio (see below) by March 28.

Contact EPA

For more information, or if you have comments about the Kalamazoo river cleanup, contact:

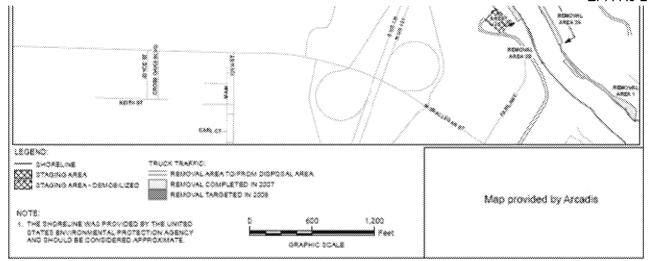
Don de Blasio

Community Involvement Coordinator EPA Region 5 (P-19J) 77 W. Jackson Blvd. Chicago, IL 60604-3590 Cleanup work on the Kalamazoo River began in early March for the 2008 construction season. This starts the second year of an estimated two-year project to remove 120,000 cubic yards of sediment (mud) containing 4,400 pounds of PCBs from the Kalamazoo River's Plainwell Impoundment. Contractors hired by Millennium Holdings LLC and Georgia-Pacific LLC are doing the work. The two companies are legally responsible for the pollution.

Polychlorinated biphenyls, better known as PCBs, are chemical compounds with common industrial uses. At high concentrations and exposures they can cause illness in humans and wildlife (see box on page 3).

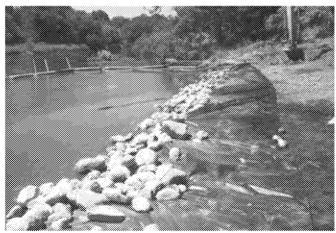
In 2007, more than 37,000 cubic yards or 1,059 truckloads of PCB-contaminated sediment were removed from the river and nearby banks. So far, workers have removed sediment and restored the banks along some 7,800 feet of river bank. This includes removal areas 1, 2, 3A and B, 4A and B, 5, 6A and B, 7 and 8 (see map on page 2). They have completed work in the Phase 1 cofferdam area with construction of the western water diversion structure (Phase 1 cofferdam), which maintains the current flow of the river over the eastern spillway area. This allowed workers to dredge behind the dam, build a water control structure, and remove the portion of the dam in the former powerhouse area.

Phase 2 (2008) work will include excavation within removal areas 9 through 13, removing the Phase 1 cofferdam, and constructing a Phase 2 cofferdam system just upstream of the dam to allow drawdown/dewatering, followed by excavation of sediment from behind the eastern portion (spillway) of the dam. Some 83,000 cubic yards of PCB-contaminated sediment will be removed this year. The water control structure which was constructed during Phase 1 will remain in place in the western channel as a means of managing the water level in the impoundment to facilitate the dredging operations. After the mid-channel and near-shore sediment removal activities are complete, the water control structure will be removed, allowing the Kalamazoo River to flow freely





50 ppm. Sediment with PCBs above this level will continue to be sent to Environmental Quality Co.'s Wayne Disposal Landfill in Belleville, Mich. Sediment with less than this concentration of PCBs, which is considered nonhazardous waste, will continue to be sent to Allied Waste's C and C Landfill near Marshall, Mich., and its Ottawa Farms Landfill near Coopersville, Mich.



Shoreline restored with river rock banks

EPA Region 5 and state partner Michigan Department of Environmental Quality continue to oversee this year's dredging. The estimated cost of the time-critical removal action is \$30 million and is expected to continue through December 2008. Site information including new photographs is posted at www.epa.gov/region5/sites/kalproject.

Kalamazoo River/Portage Creek supplemental cleanup studies

A February 2007 legal agreement requires additional study of the Kalamazoo River and Portage Creek. Planners divided the river into seven areas for the additional investigation. Area 1 consists of the Kalamazoo River between Morrow Dam and Plainwell, and Portage Creek between Cork Street and the Kalamazoo River. Phase 1 of the investigation work was conducted last fall. Phase 2 investigations are being developed and will be conducted this spring.



Removing vegetation and contaminated soil

Update for the landfills

In addition to the removal action at the Plainwell Impoundment, cleanup developments on other parts of the Kalamazoo River site are occurring.

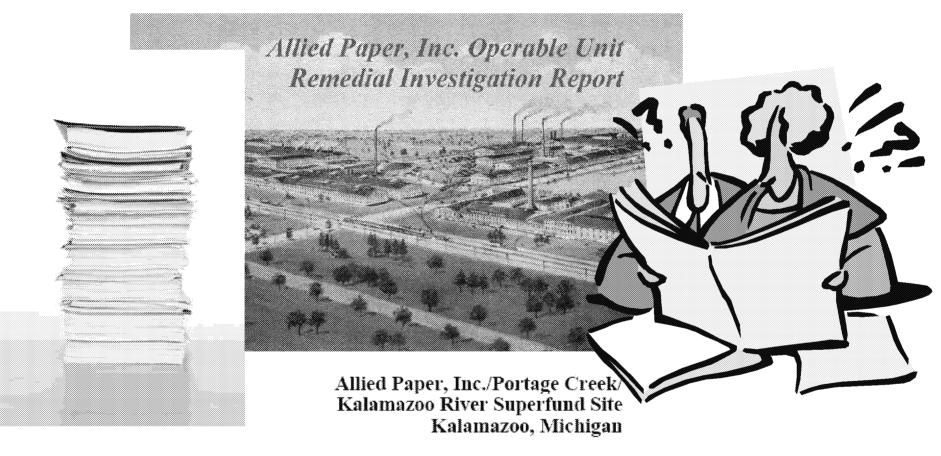
* MDEQ is finalizing a cleanup investigation at the Allied Paper Landfill. Copies of the study will be given to members of the public and the city of Kalamazoo. EPA met with the city and will be working with them to make sure the study considers all issues deemed important by the city. Shortly after the public meeting, EPA will be engaging with the public on reuse ideas.

- After completing the emergency action to excavate residuals out of the powerhouse channel, regrade and pull back the eastern side of the 12th Street Landfill. Weyerhaeuser is now working on the cleanup design for the landfill. The reshaping will protect the landfill and prevent erosion when the river is rerouted to its original channel—part of the overall design for the Plainwell Impoundment. EPA expects the design phase to continue through 2008.
- Willow Boulevard/A-Site Landfill will be capped and a monitoring network installed. EPA is working with the responsible parties about designing and implementing a final cleanup plan for the work. The trustees are working to make this a joint agreement.
- A gas collection trench was built along King Highway in late 2007.



~9,800 Page Report!

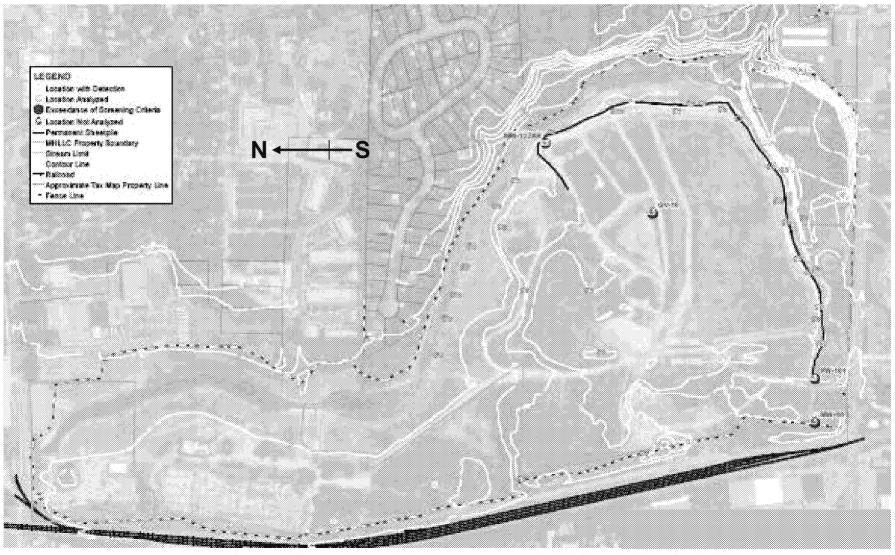
Allied Paper, Inc./Portage Creek/ Kalamazoo River Superfund Site



March 2008

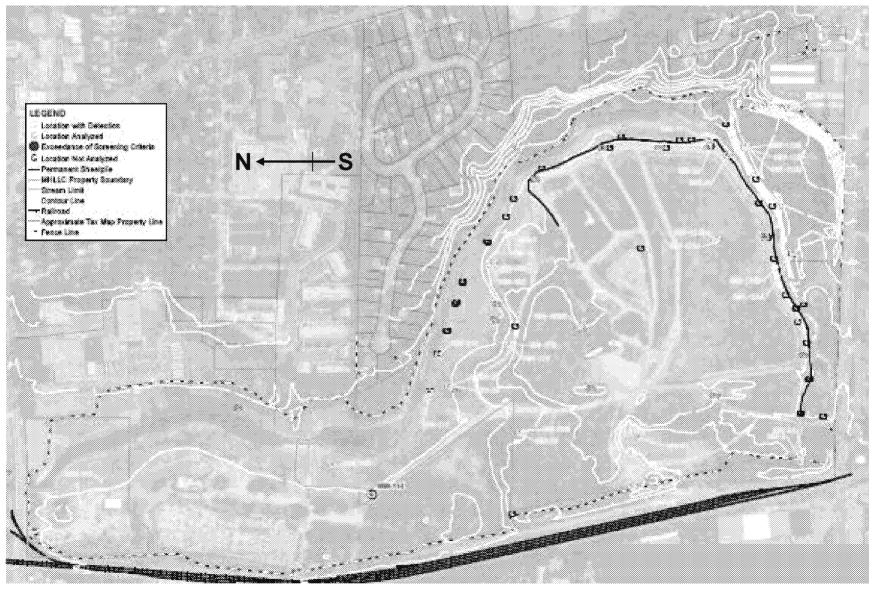
Prepared For: MDEQ Prepared By: CDM

Figure 3: Distribution of PCBs in Ground Water



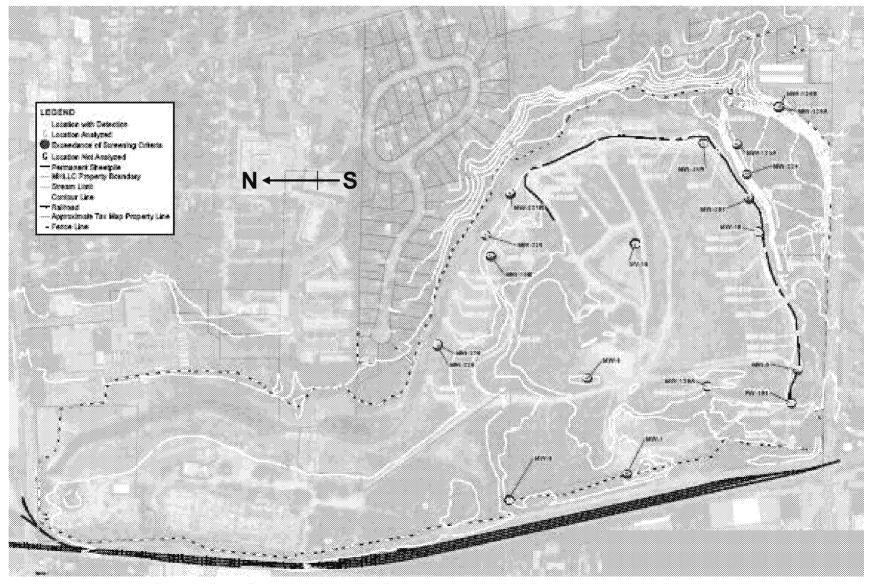
Reproduction of Figure 4-4B from Allied Paper, Inc. Operable Unit Remedial Investigation Report

Figure 4: Distribution of VOCs in Ground Water



Reproduction of Figure 4-4C from Allied Paper, Inc. Operable Unit Remedial Investigation Report

Figure 5: Distribution of Inorganics in Ground Water



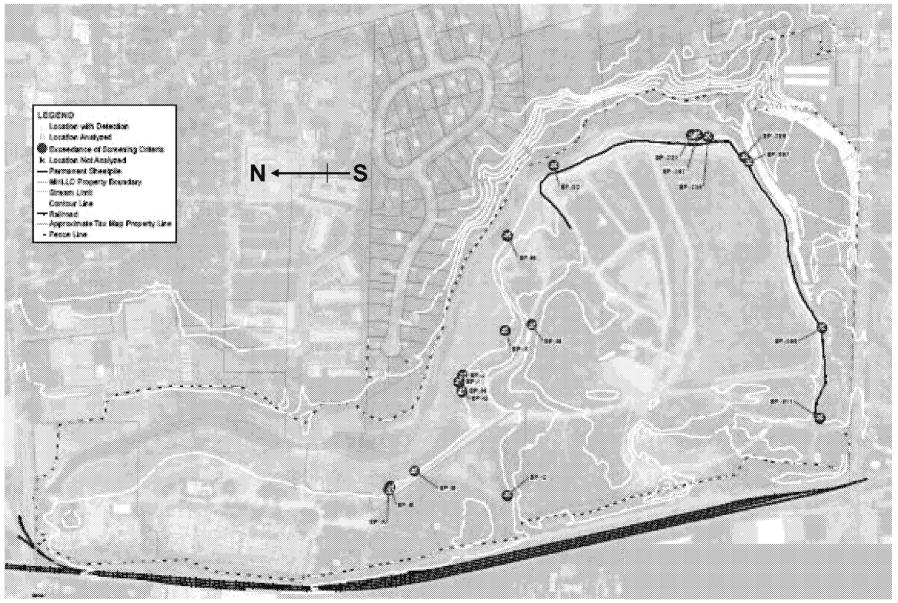
Reproduction of Figure 4-4H from Allied Paper, Inc. Operable Unit Remedial Investigation Report

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Figure 6: General Chemistry Parameters

Reproduction of Figure 4-4IB from Allied Paper, Inc. Operable Unit Remedial Investigation Report

Figure 7: Inorganics in Ground Water Seeps



Reproduction of Figure 4-4K from Allied Paper, Inc. Operable Unit Remedial Investigation Report

5-08 MDEQ Source Water Protection Unit's Response RE: Remedial Investigation Report

"It is the opinion of the SWPU staff that there is little likelihood of an impact to the public water supply wells in question."

However, "The possible migration of contaminants off site, or to depths deeper than those at which the ADS investigation was conducted, cannot be completely ruled out. At a minimum, it is recommended that as part of the feasibility Study Process a series of 'sentinel wells' be installed northwest of the ADS."

And "Little information at the ADS was collected for elevations below 740 ft AMSL....No information at the ADS was obtained on the regional flow system in which city of Kalamazoo wells are completed."

MDEQ Source Water Protection Unit's Response to Remedial Investigation Report

"The list of contaminants of concern (COC) at the ADS is extensive..." (Detections of PCBs, VOCs, SVOCs, and inorganics).

"Perhaps of greatest concern is the fact that there are exceedances for inorganics at the western property line. No sampling was conducted beyond the property line to insure there had been no migration of the inorganics off site."

"Sixteen seeps were identified and sampled providing inorganic levels above the screening criteria. The locations of greatest concern are those located to the northwest at the property boundary."

"Note also there is a subtle mounding of groundwater at the ADS as a result of the sheet piling ... that was placed in an effort to prevent the discharge of contaminants to the south and east into Portage Creek."

MDEQ Source Water Protection Unit's Response to Remedial Investigation Report

"Because no sampling was done off site to the west-northwest, it is impossible to rule out the possibility that contaminants have migrated beyond the boundary of the ADS in a northwesterly direction. Further, all of the ADS investigation was conducted in what appears to be the surficial aquifer system. The possibility that contaminants from that site have migrated into the regional flow system cannot be totally ruled out."

"While the available information suggests that Portage Creek is the discharge point for groundwater, it is possible the subtle mounding of groundwater at the site may have pushed chemicals on a more northerly vector. As noted above, the presence of contaminants at unacceptably elevated levels on the north and west boundaries of the site make this a distinct possibility."

MDEQ Source Water Protection Unit's Response to Remedial Investigation Report

Recommendations

"It would be beneficial if additional information were collected to the north and west of the ADS."

- Groundwater sampling at shallow and at depth to insure that migration of contaminants has not occurred beyond the site
- Collection of SWLs to confirm groundwater flow
- Installation of sentinel wells to be screened to intercept the probable flow path(s) between the ADS and wells located at Water Pumping Stations 1 and 3. Groundwater flow modeling may need to be conducted to identify the well depths most useful for the purpose of monitoring for contaminant migration.

EPA meetings on Kalamazoo River Superfund site May 15, 6:30 P.M., and May 16, 9:30 A.M.

Release date: 05/07/2008

Contact Information: Don de Blasio, 312-886-4360, deblasio.don@epa.gov William Omohundro, 312-353-8254, omohundro.william@epa.gov Mick Hans, 312-353-5050, hans.mick@epa.gov

FOR IMMEDIATE RELEASE No. 08-OPA084

(Chicago, III. - May 7, 2008) U.S. Environmental Protection Agency Region 5 is holding two open houses on Thursday, May 15, and Friday, May 16, at the Edison Neighborhood Association office, 816 Washington Ave., Kalamazoo, Mich., to discuss the latest developments at the Kalamazoo River Superfund site.

Thursday's session will begin at 6:30 p.m., with a presentation at 6:45 p.m. (Officials will be available after the presentation.) The Friday session will be from 9:30 to 11:30 a.m. with no formal presentation but an opportunity to meet one-on-one with EPA and other officials.

The sessions will include results of a study of the contamination at the Allied Paper Landfill portion of the site.



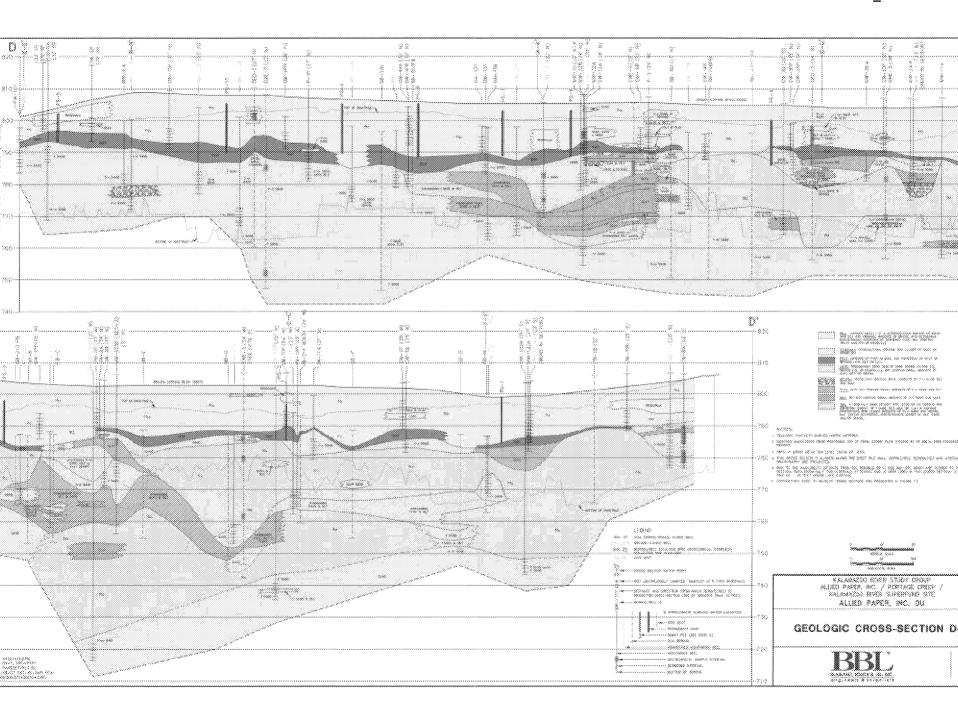
For more information or special accommodation at the meetings, contact Community Involvement Coordinator Don de Blasio by May 12 at 800-621-8431, Ext 64360, or deblasio.don@epa.gov. Site information is also posted on the Internet at http://www.epa.gov/region5/sites/kalproject.

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City-identified Issues

(as expressed in a May 2008 letter to EPA from the City regarding an initial response to the RI)

- Lack of any discussion in the RI of potential or possible contaminant pathways from OU-1 to the City's subject wellfields (i.e. existing contaminants, lack of regional flow evaluation, etc.)
- Interpretations and conclusions of site characterization
- Integrity of existing cap over materials from Bryant Mill Pond
- Suitability of using waste material as an "equivalent" landfill liner
- Status and effects of joint sheet piling groundwater collections system
- Anticipated Toxic Substances Control Act (TSCA) waiver to be issued by the EPA Region V Regional Administrator
- Impact from the formally Type III permitted landfill on the Allied site
- Appropriate data collection as part of RI in anticipation of future economic development within OU and the Portage Creek Corridor
- Collection of this additional information prior to FS



WHAT'S GOING ON NOW? WHAT'S NEXT?

- Continue Review of 3-08 Remedial Investigation Report (RI)
- Provide detailed comments to EPA/MDEQ regarding RI by 8-08 to more specifically address existing contamination at the site to evaluate risks
- Prepare for Feasibility Study (FS)
- Continue effort to stop disposal of PCB laden sediment at Allied Site beyond 2008 (it appears reasonable to think that no new waste material will be disposed of at the site)
- The primary current issue is to determine what should be done with the existing site and what risks does it pose to the PWSS and adjacent area
- Work with the Allied Site Task Force, KRWC, the KRCC, and others to address site issues/concerns

LESSONS LEARNED

- EPA's "Temporary Disposal" can mean it's temporary until it is made permanent, not that it was intended to be removed.
- EPA's "Time Critical" for Superfund remediation shouldn't have overlooked the critical issues identified by the public regarding proposed local disposal areas.
- EPA can legally side-step their own laws in the interest of their own projects.
 Would they accept the proposal from another entity?
- The 1% disposal solution (4,400 lbs PCBs vs 350,000 lbs) was 100% of the problem. Other sites were still needed for 99% of other waste.
- Will the real EPA please stand up? It is strange to challenge EPA's weak
 position on protecting drinking water supplies when they usually are criticized
 for over-protecting the environment. In this case, it seemed that their hard work
 and success in securing PRP dollars over-shadowed any thought about
 possible drinking water pathways that the disposal location of contaminated
 sediment presented.
- It is possible that a community can come together for a common cause from several different interests/angles and demonstrate that the "system" can still work to solve issues. "Never doubt that a small group of thoughtful committed citizens can change the world; indeed, it's the only thing that ever has." (Margaret Mead).
- Wellhead Protection is relevant to real life situations and is not just a program report on a shelf.